



Coratopetalum gummiferum

CERATOPETALUM gummiferum.

Three-leaved Red-gum Tree.

DECANDRIA MONOGYNIA.

GEN. CHAR. *Cal.* 5-partitus, staminiferus, persistens.*Petala* 5, pinnatifida. *Antheræ* calcaratæ. *Capsf.* in fundo calycis, tectâ, bilocularis.*Cal.* 5-cleft, bearing the stamina, permanent. *Petals* 5, pinnatifid. *Antheræ* with a spur. *Capsf.* in the bottom of the calyx, covered, two-celled.

WHEN a botanist first enters on the investigation of so remote a country as New Holland, he finds himself as it were in a new world. He can scarcely meet with any certain fixed points from whence to draw his analogies; and even those that appear most promising, are frequently in danger of misleading, instead of informing him. Whole tribes of plants, which at first sight seem familiar to his acquaintance, as occupying links in Nature's chain, on which he has been accustomed to de-

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pend, prove, on a nearer examination, total frangers, with other configurations, other œconomy, and other qualities; not only all the species that present themselves are new, but most of the genera, and even natural orders.

The plant before us justifies the above remarks. Its botanical characters are so new, we can scarcely tell to what tribes it is allied; and although, from the peculiar felicity of the Linnæan sexual system, founded on parts which every plant *must* have, we are at no loss to find its class and order in that which is an artificial system, we still scarcely know what genera are its natural allies. It, however, seems most nearly related to *Dictamnus* and *Ruta*, of all the Decandria Monogynia, and may be safely inserted near them. We dare not positively say it belongs to M. De Jussieu's natural order of *Rutaceæ*; but for the present it may be so considered, till future discoveries shall authorise us to constitute a new one. The generic character above given certainly distinguishes it from all other genera, and the name applies to the very unusual horn-like divisions of the petals, like those in the leaves of the *Ceratophyllum* of Linnæus. One species only is already known.

This, Mr. White informs us, is one of the trees (for there are several, it seems, besides the *Eucalyptus resinifera*, mentioned in his Voyage, p. 231.) which produce the red gum. He further remarks, that it is the only wood of the country that will swim in water.

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The tree is of a considerable height, upright, much branched, and of a beautiful appearance when the flowers are come to maturity, or rather about perfecting their seed, as in the specimen here figured. Every part is quite smooth. *Branches* opposite, round, slightly angular at the top. *Leaves* opposite, on footstalks, ternate. *Leaflets* sessile, nearly equal, lanceolate, obtuse, ferrated, veiny, shining, paler beneath. *Stipulae* none. *Panicles* terminal, first oppositely, and then alternately branched, with a small pointed glutinous bractea at the base of each partial flower-stalk. *Flowers* at first expanding small, but the calyx afterwards becomes much enlarged, whitish, tinged with red, and all their parts continue permanent till the fruit is ripe. The *Calyx* is inferior, five-cleft; its segments lanceolate, acute, slightly ribbed; its margin at the base of the segments surrounded with a ring bearing the petals and stamina, as in icosandrous plants. *Petals* alternate with its segments, at first equal to them in length, then much shorter, irregularly and unequally pinnatifid; their divisions linear and acute. *Stamina* shorter than the petals, awl-shaped. *Antheræ* roundish, of two oval cells, and with a spur at their base. *Germen* in the bottom of the calyx, globular, ten-ribbed. *Style* awl-shaped, short. *Stigma* cloven, acute. *Capsule* in form like the germen, small, with a coriaceous covering, originally two-celled, but one side seems always abortive, and the seed in the other pushes the partition from the centre.

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We have only seen the fruit half ripe, and the imperfect seeds were withered, but they appear to be solitary.

EXPLANATION OF TAB. III.

1. A bunch of young flowers, of their natural size.
2. The more advanced calyx laid open, with its petals and stamens in their proper situations.
3. A petal and stamen separate.
4. The same magnified.
5. Back of the filament and anthera.
6. Germen in a young state.
7. Its coriaceous covering.
8. Stigma.
9. Germen somewhat farther advanced, cut across to shew the cells.

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